# A myriad of applications









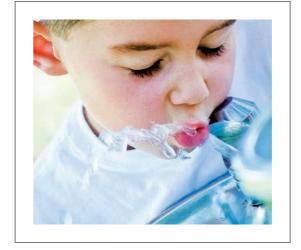






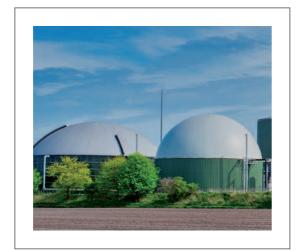


















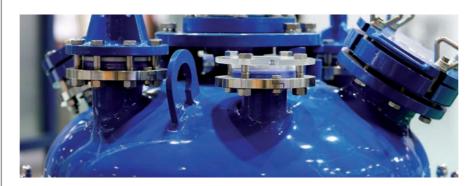


#### **Pharma**



In pharmaceutical industries, reliability, continuity and partnerships are the central themes. We strive to deliver just that, by offering a range of carbons in the highest purity, meeting pharmaceutical industry standards and quality control under GMP procedures, backed by dedicated application support.

#### Chemicals



A wide choice of activated carbons assure the best fit for your specific process. Whether you are looking for bulk applications, or for a tailor-made process in fine chemicals production, we can help you select the most economical solution.

#### Oil & Gas



Natural gas, oil and petrochemical products have to be pure and of high quality. Contaminants such as mercury, colors, odors, sulfur components are unwanted substances. Activated carbon is an ideal choice for the purification of various products for the gas and oil industry because of its very high adsorption capacity for a wide array of molecules ranging from odorous compounds to dark color bodies. It is also used as a catalyst or a catalyst carrier.

#### **Cosmetics**



Cosmetics and personal care products can be produced including 'charcoal' as abrasive, adsorbent, colorant, and/or opacifier. NORIT® produces special 'activated charcoals' with welldefined properties, including a very high purity.

## **Catalysts**



NORIT activated carbons, whether standard or tailor-made, make the perfect catalyst carrier. In comparison with other carriers like silica or alumina, NORIT activated carbons have a greater internal surface area. The optimal carbon type, quality control, application support and dedicated customer contact make sure we can offer the continuity required.

## **Mining**



We continually provide technical expertise, high quality and reliable product to the gold mining industry. The specially developed activated carbons will improve CIL, CIP and CIC plant performance significantly, reducing carbon consumption and gold losses.



#### Food



In the food industries we truly are a worldwide player, offering and selling food grade carbons of controlled purity in a wide array of applications. Whatever you eat, there is a good chance that NORIT® activated carbon was used in producing it.

#### Beverage



You would be surprised to find out the multitude of beverages that are being produced using NORIT activated carbons. Our strictly food grade carbons are successfully applied at any scale of operation you may have, from large bottling plants to small wineries.

#### **Potable water**



Our experience in potable water purification all over the world has led to a balanced and tailormade series of activated carbon types, including our "green" reactivation services, that make it safe to state: 'You never need to force fit a NORIT activated carbon.'

#### **Process water**



NORIT activated carbons are used in a wide range of process water applications, some of which are highly demanding. Pharmaceutical industries use ultra-pure process water in drug manufacturing. Oil refineries and power plants use special carbon grades to polish their steam condensate before reuse in high pressure boilers.

#### Wastewater



Price/performance and easy-to-use solutions are our focal points in the wastewater purification markets. Our focus on cost-effectiveness in environmentally sound solutions is further stressed by our reactivation services, where purification is optimized whilst minimizing carbon consumption.



#### **Automotive**



NORIT® activated carbons are used in the automotive industry for various applications, notably gasoline evaporative loss control. Our own developments have resulted in dedicated carbon grades for this application. Our dedicated production plant and technical support yield the best activated carbon solution.

#### Air



NORIT activated carbons are used in a wide array of air purification processes. To name a few: odor removal from sewage vent air, airport air conditioning to remove aircraft fuel fumes, and ultra-purification of process air used in pharma production plants.

#### Reactivation



We provide reactivation services from modern plants. Two main classes of exhausted carbons are distinguished:

- Green listed carbons: originating from drinking water treatment and food industries
- Amber listed carbons: originating from gas/air purification processes, wastewater treatment and purification of chemicals

#### Flue gas



NORIT activated carbons play a key role in flue gas treatment. Around the world, in hundreds of waste incinerators, coal fired power plants, sintering plants, and at all other kinds of combustion plants, NORIT activated carbons are involved helping plants to meet current and future environmental regulations.

#### **Biogas**



Biogas and Renewable Natural Gas (RNG) are very important as alternatives to fossil fuels. However, prior to their use they must often be purified to remove hydrogen sulfide, siloxanes, and/or higher hydrocarbons. NORIT activated carbons provide excellent and innovative solutions to these challenges.

#### **Mobile filter units**



For a range of liquid applications and air purifications we offer mobile filter adsorbers for rental. Designed to handle and transport the used carbon in an optimum way these units are used in combination with our reactivation services.



# NORIT® Activated Carbon purification for living

Building on our > 100-year history of innovation in manufacturing and product development, NORIT Activated Carbon is the world's most experienced and one of the largest producers of activated carbon.

Our products are used to remove pollutants, contaminants and/or other impurities from water, air, food and beverages, pharmaceutical products and other liquids and gases in an efficient and cost-effective manner.

In addition to our unparalleled product portfolio, we offer a full range of activated carbon services including rental systems, carbon reactivation, bulk delivery and change-out, carbon evaluation, as well as technical service and support to help our customers meet their specific purification needs.

We provide our customers with a worldwide network of sales and service support.

In fact, we manufacture activated carbon and reactivate carbon in multiple plants around the world. So whether you have one operation or many facilities around the globe, we've got you covered.

HELPING OUR
CUSTOMERS MEET
THEIR SPECIFIC
PURIFICATION NEEDS





Our sales, technical service and customer service teams are well prepared to serve customers around the world.



norit.com

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Brochure A myriad of applications 03/2023